

10/502065

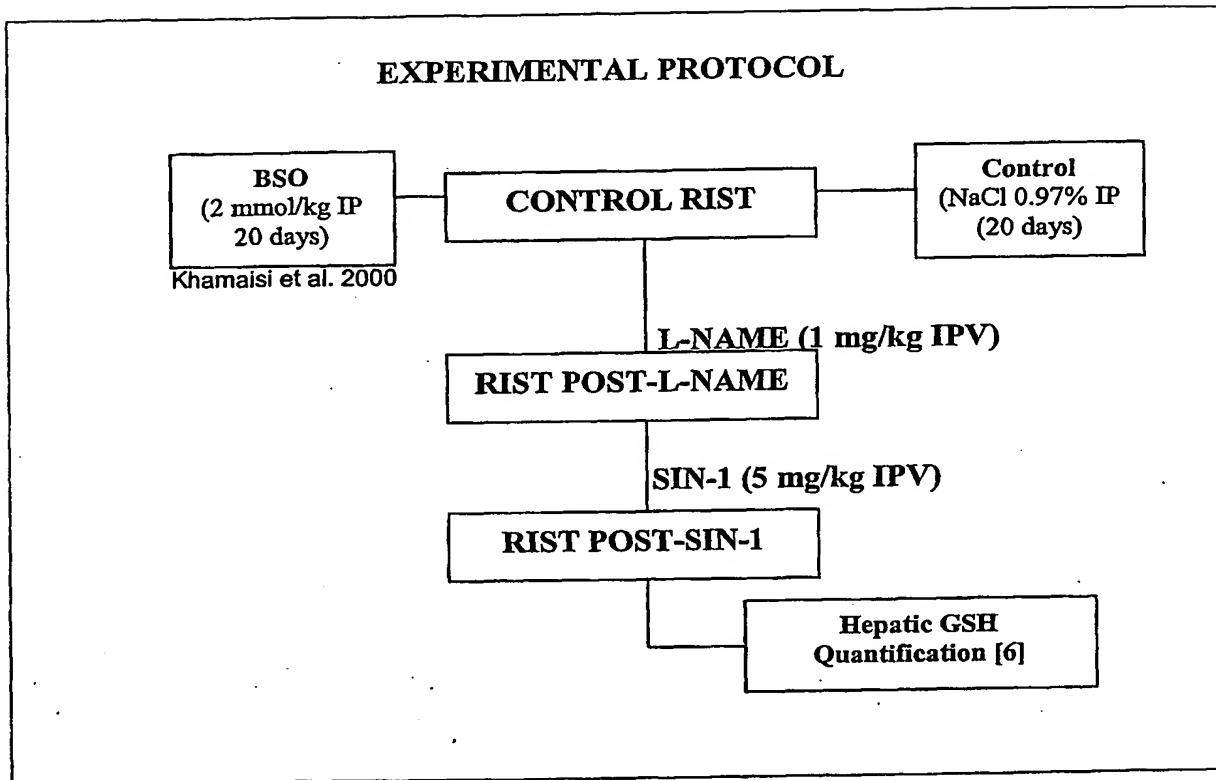
WO 03/061639

Inventor: Lautt, et al.
Docket No.: 14233.0017USWO
Title: USE OF GLUTATHIONE SYNTHESIS STIMULATING COMPOUNDS IN
REDUCING INSULIN RESISTANCE
Attorney Name: Douglas P. Mueller
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T/CA03/00079

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Figure 1



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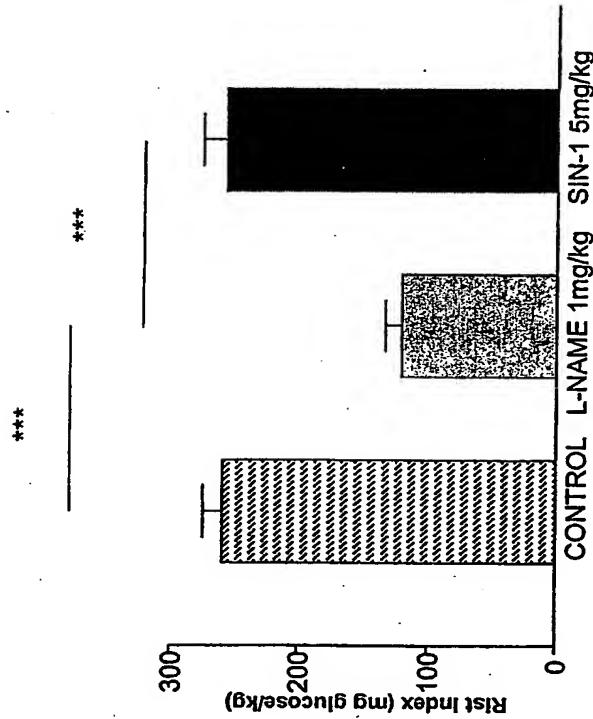
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Control Group

Figure 2(a)



Control Group (n=6): L-NAME (1mg/kg, ipv) reduces the RIST Index from 260.2 ± 15.6 mg glucose /kg to 121.2 ± 12.8 mg glucose /kg ($52.3 \pm 5.8\%$ inhibition). SIN-1(5mg/kg, ipv) restores insulin response with a RIST index of 258.1 ± 18.5 mg glucose /kg. *** = p<0.001

WO 03/06163

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BSO Group

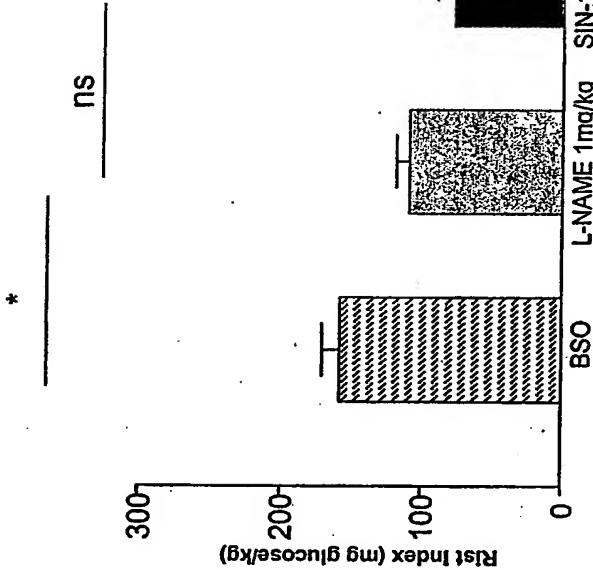


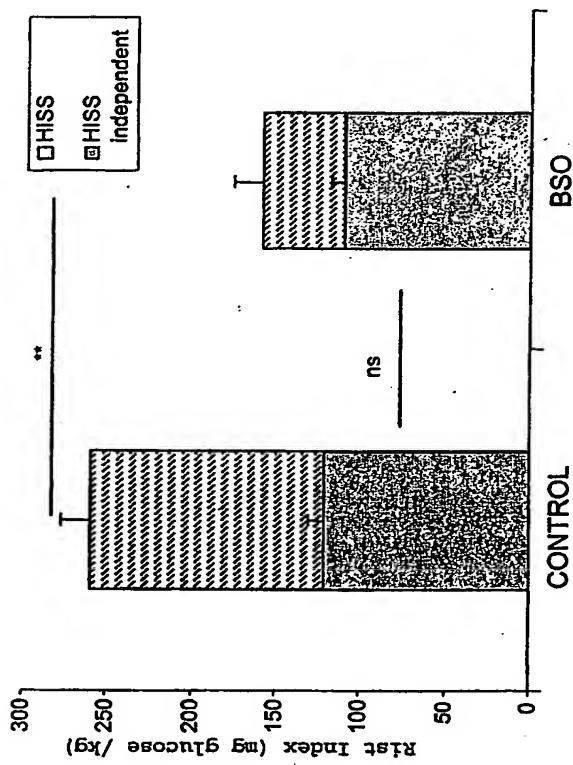
Figure 2(b)

BSO Group (n=5): The control RIST index was 158.4 ± 12.2 mg glucose /kg. Intraportal administration of L-NAME(1mg/kg) reduced significantly the RIST Index to 109.8 ± 9.1 mg glucose /kg.ipv administration of SIN-1 did not reverse the RIST Index to control values.
 *= p<0.05; ns= non significant

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Insulin Action

Figure 2(c)



HISS-dependent and HISS-independent components of insulin action in BSO and control groups. HISS-independent components are not different in both groups. HISS is significantly reduced in BSO group (49.3 ± 8.56 mg glucose /kg) compared to control group (138.9 ± 22.8 mg glucose /kg) corresponding to a decrease of 64.4% of HISS action. **=p<0.01; ns= non significant

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Hepatic GSH Content

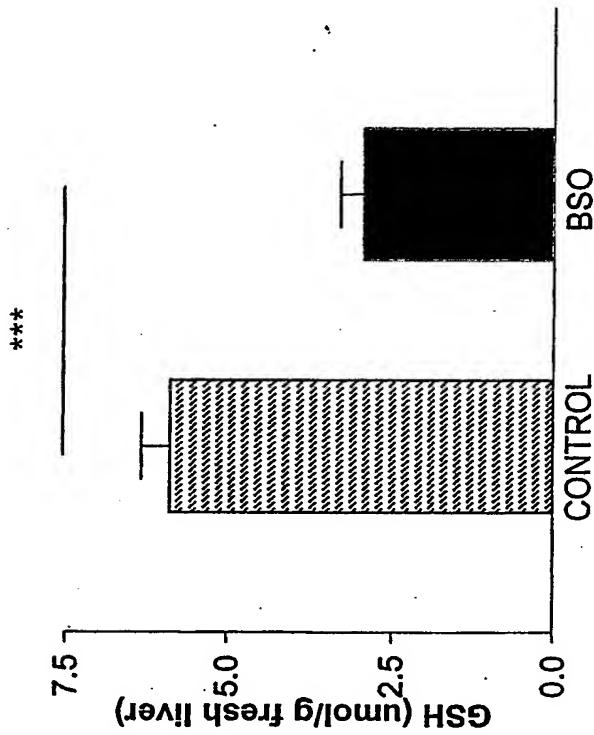


Figure 2(d)

Hepatic glutathione content in BSO (n=5) and control (n=6) groups. In control group hepatic GSH content was significantly higher (5.66 ± 0.1umol/g fresh liver) than in BSO group (2.96 ± 0.4umol/g fresh liver). Hepatic GSH content was decreased by 48.3 ± 6.9% in BSO group.
***=p<0.001